FORSYTHE SERIES

EAW KF550C

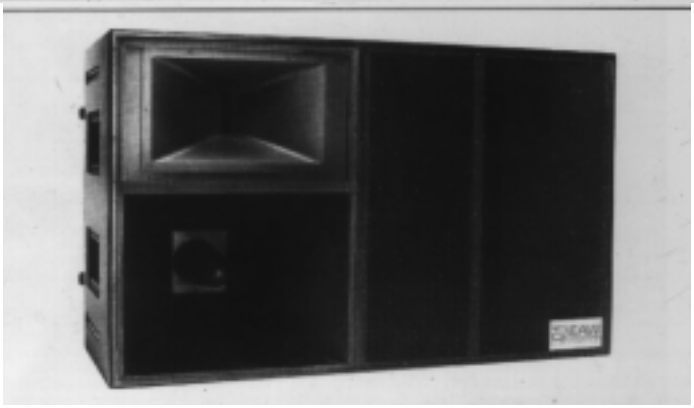
"One Box" Horn Loaded Full Range System

The Forsythe Series KF550 is a high definition sound reinforcement loudspeaker system designed for high output sound reinforcement applications. Its "One Box" design permits ease transport and idealized driver alignment and subassembly integration resulting in maximally flat frequency and phase response. The use of complex subassemblies provides full horn loading over its entire operating range for precise control of coverage and directivity.

The KF550's advanced technology is e direct result of EAW's unmatched expertise in "One Box" system design and construction; after all, EN invented the "One Box" horn loaded system. By working closely with the leading sound rental companies throughout the world, we designed the KF550 for the way you use professional loudspeakers. You'll find that its features will make your operation more efficient and cost effective.

We invite you to compare other systems and see the performance and features that set the KF550 apart from all other high output loudspeaker systems.

We're confident you'll choose the KF550 "One Box System That Defies Competition".



Advanced Designed Horn Subassemblies

The Forsythe designed mid and bass horn subassemblies utilized in the KF550 are the most sophisticated on the market. They were developed from advanced computer optimized mathematical models and then are precisely created with a proprietary polyurethane reinorced wood construction technique. The final designs are **tested for both acoustical** and mechanical performance and any necessary upgrades are made to the design. Unlike competitive systems that, at best, approximate a true horn., the KF550's true mathematical correct horns provide exceptionally smooth air loaded impedance characteristics. The finished product results in fidelity that is not only significantly better than any other horn system but surpasses most vented systems, and unprecedented output capabilities.

Industry Standard Mid Range Definition

The mid range subassembly in the KF550 is adapted from EAW's legendary MR-102, the world's most popular horn loaded mid-bass system. EAW has produced thousands sands of these mid-bass horns, and they are in daily use in some of the most demanding professional applications from the Palladium in New York to the Sun Plaza in Tokyo. The MR102 ior performance. This device eliminates the power response irregularities that plague all competitive midbass horns by maintaining proper loading from the mouth right down into the throat. The result is smooth frequency response on and off axis, so the sound character of the KF550 is identical anywhere in its coverage area.

Constant Coverage High Frequency Subassembly

The KF550C's high frequency subassembly is the new RCF H9040 horn which offers constant coverage over its entire operating band` The horn flare configuration has been maximized to achieve constant coverage without the increased distortion of competitive designs. To ensure high mechanical strength and total freedom from resonances, the horn is constructed of high pressure die cast aluminum alloy with a minimum thickness of 4 mm.

The H9040's throat accepts all standard two-inch exit drivers. The TAD 4001 is recommended for use when extended high frequency performance is required. The JBL 2445 can also be used for less demanding applications.

Efficient Interface to Amplifiers West Signals

The KF550C includes as standard a unique input arrangement, including a hinged door that reveals a cable transport compartment with a recessed input termination panel and wiring barrier strip. The input termination panel includes two parallel EP Series 8 pin connectors and banana type test points for each driver in the system. The test points enable easy testing of individual drivers without the need for special cabling.

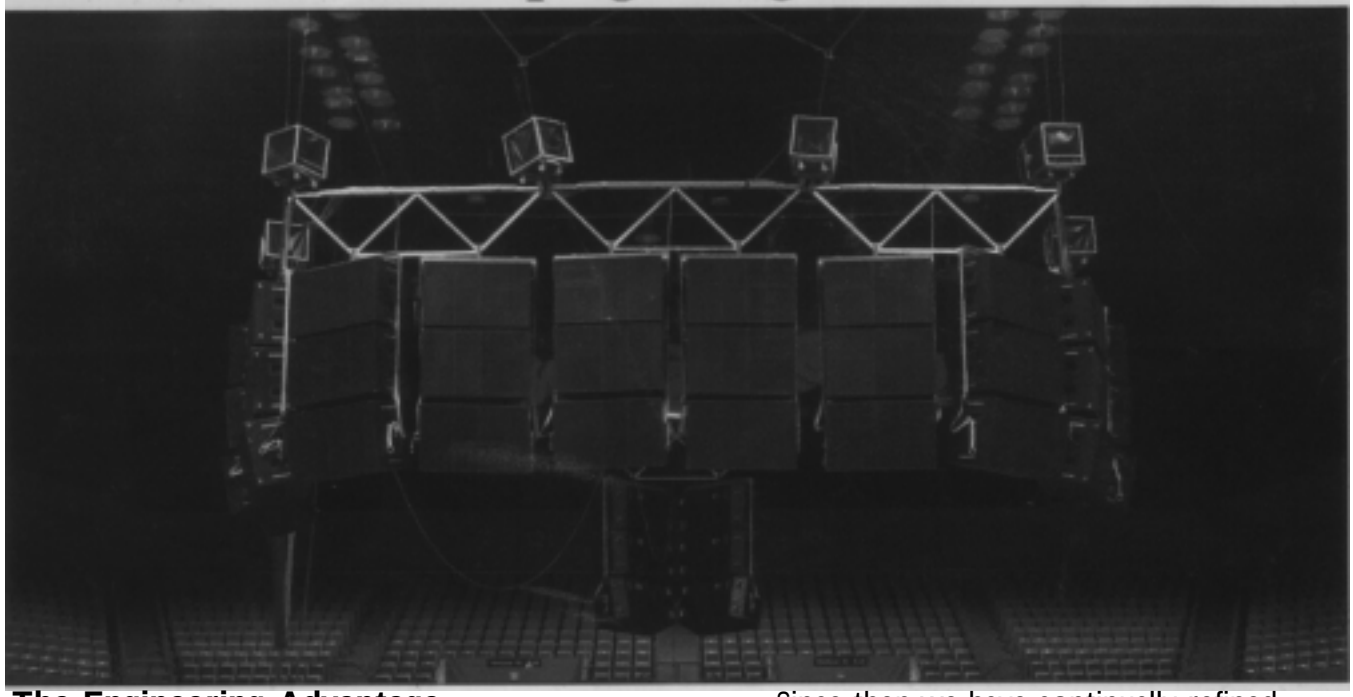
Reliability: The Industry Standard

Constructed from imported 18 ply to the inch cross grain laminated hardwood with all horn flare reinforced with high density polyurethane foam, the KF550 utilizes the technology that has made EAW the world's leading supplier of high output systems for portable applications. Other standard KF550 features include black catalyzed polyurethane chemical coating finish, recessed rattle free metal handles, slant back with heavy duty castors and vinyl coated perforated steel speaker grills.

The KF550: Reliability, Performance, Quality, In Harmony.

EAW KF550C

It keeps getting better



The Engineering Advantage

When you consider the fact that EAW builds the KF550 it should come as no sur prise that it is the qualitative standard of the industry. After all, EAW's director of engi neering, Kenton Forsythe, has spent the last twenty years advancing the "state of the art" in concert sound loudspeaker systems. His contributions to the industry include:

1972 Forsythe B215, the world's first 2 x 15 inch bass horn to incorporate a phase coupler and true exponential flare (not to mention that it fit through most doors).

1976 Forsythe SR1 09, the world's first cone mid **range horn utilizing** a phasing plug and lead reinforced fiberglass construction.

1977 Forsythe B212CT, using polyurethane filled subassemblies to create the world's most mathematically correct bass horn.

1978 EAW MR102, the first mid bass horn to use a center displacement plug for flat power response.

1978 EAW/Carlo CS3, the world's first "One Box" horn loaded flying system.

1979 EAW BH800, the first bent horn using polyurethane reinforced wood construction.

1981 EAW JF500, the world's first all horn loaded compact full range system.

1983 EAW KF550, the world standard "One Box" flying system with flying strip hardware enabling easy construction of complex arrays with only two fly points per cabinet.

Since then we have continually refined the KF550 to stay well ahead of our imitators. The new KF550C version adds the H9040 constant coverage high frequency horn, full frontal coverage vinyl coated perforated steel grills and rear panel cable/connector chamber as standard. This is in addition to the standard features and performance that has made the KF550 the first choice of sound companies in the past.

Your crews will love the KF550C because it loads in and flies so easily, and your accountant will appreciate its transport efficiency. But we're confident that you will choose the KF550C because it sounds great.

Acoustical System Performance Data

Frequency Response	Quad Array		Single Unit
- 10 dB:	35 Hz to 20,000 Hz		42 Hz to 20,000 Hz
+- 3 dB:	45 Hz to 18,000 Hz		55 Hz to 18,000 Hz
Coverage Angle (-6dB)	Horizontal: 80 degrees; Vertical: 40 degrees		
Axial Sensitivity			
HF Subassembly:	112 dB SPL I w @ I in		
MF Subassembly:	109 dB SPL 1 w @ I m		
LF Subassembly:	109 dB SPL 1w @ 1m		
Power Handling			
HF Subassembly:	70w 100 Hour Sine Wave		200w AES
MF Subassembly:	150w 100 Hour Sine Wave		375w AES
LF Subassembly:	500w 100 Hour Sine Wave		1000w AES
Maximum SPL at I meter	Long Term		Peak
At 10k Hz:	130.5 dB SPL @ 70w		135 dB SPL @ 200w
At 1k Hz:	130.5 dB SPL @ 150w		134.5 dB SPL @375w
At 100 Hz:	136 dB SPL @ 500w		139 dB SPL @ 1000w
Nominal Impedance	HF Subassembly	MF Subassembly	LF Subassembly
LF Horn Subassembly	16Q	8Q	4Q

Type:	Forsythe Designed Bent Bass Horn
Construction:	Cross-Grain Laminated Birch Plywood With High Density Polyurethane Foam Reinforcing
Driver:	Two RCF Laboratory Series L15/554K 380 mm 0 5-in) Cone Driver With 100 mm (4-in) Voice Coil

MF Horn Subassembly

Type:	Forsythe Designed Constant Coverage Horn Incorporating Center Displacement Plug
Construction:	**Cross-Grain Laminated Birch Plywood With** High Density Polyurethane Foam Reinforcing And Cast Polyurethane Phasing/ Displacement Plug
Driver:	RCF Laboratory Series LI 2 / P1 I W 300 mm (12-in) Cone Driver With 100 mm (4-in) Voice Coil

HF Horn Subassembly

Type:	RCF H9040 Constant Coverage Horn
Construction:	High Pressure Die Cast Aluminum Alloy
Driver:	User Supplied TAD 4001 (JBL 2445 can be used for applications where extended high frequency response is not required)

Additional Descriptive Data

Finish:	Black Polyurethane Chemical Coating
Connectors:	Input Panel Located In Rear Cable Transport Compartment Includes Dual Canon EP-8 Males Plus Individual Banana Plug Test Points On Each Driver. All Connectors Are Wired To Internal Barrier Strip That In Turn Is Connected To The Drivers For Easy Field Reconfiguration Of The EP-8 Pins.
Rigging:	Four Multi-Locking Point Strip Type Aircraft Fittings At The Top And Bottom Of The KF550's Side Panels, And Two Matting Clip Lock Points Included As Standard.
Transport:	Slant Back With Two Heavy Duty Castors For Simple Tilt And Roll Transport
Protective Grill:	Heavy Gauge Vinyl Coated Perforated Steel Grill Screens Covering The Entire Front Of The Cabinet
Dimensions:	32.5 in x 53.75 in x 29.75 in